

WO 2005/058960

PA0394 PCT - Sequence Listing - PatentIn 3.2.ST25  
SEQUENCE LISTING

&lt;110&gt; Amersham Biosciences UK Limited

&lt;120&gt; Cytochrome C Protein and Assay

&lt;130&gt; PA0394

&lt;140&gt; GB0329353.7

&lt;141&gt; 2003-12-19

&lt;160&gt; 15

&lt;170&gt; PatentIn version 3.2

&lt;210&gt; 1

&lt;211&gt; 315

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1

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acaggtcagg cccctggata ctcttacaca gccgccaata agaacaaagg catcatctgg 180

ggagaggata cactgatgga gtatttggag aatcccaaga agtacatccc tggaacaaaa 240

atgatcttg tcggcattaa gaagaaggaa gaaagggcag acttaatagc ttatctaaa 300

aaagctacta atgag 315

&lt;210&gt; 2

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2

Met Gly Asp Val Glu Lys Gly Lys Lys Ile Phe Ile Met Lys Cys Ser  
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20 25 30Leu His Gly Leu Phe Gly Arg Lys Thr Gly Gln Ala Pro Gly Tyr Ser  
35 40 45Tyr Thr Ala Ala Asn Lys Asn Lys Gly Ile Ile Trp Gly Glu Asp Thr  
50 55 60Leu Met Glu Tyr Leu Glu Asn Pro Lys Lys Tyr Ile Pro Gly Thr Lys  
65 70 75 80Met Ile Phe Val Gly Ile Lys Lys Glu Glu Arg Ala Asp Leu Ile  
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100 105

## PA0394 PCT - Sequence Listing - Patentin 3.2.ST25

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<220>  
<223> Synthetic oligonucleotide

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aaacttaccc ttaaatttat ttgcactact ggaaaactac ctgttccatg gccaacactt 180  
gtcactactc tctcttatgg tggtcaatgc tttcaagat acccagatca tatgaaacgg 240  
catgactttt tcaagagtgc catgcccga ggttatgtac aggaaagaac tatattttc 300  
aaagatgacg ggaactacaa gacacgtgct gaagtcaagt ttgaaggtga tacccttgtt 360  
aatagaatcg agttaaaagg tattgatttt aaagaagatg gaaacattct tggacacaaa 420  
ttggaataca actataactc acacaatgta tacatcatgg cagacaaaca aaagaatgga 480  
atcaaagtta acttcaaaat tagacacaac attgaagatg gaggcggtca actagcagac 540  
cattatcaac aaaatactcc aattggcgat ggccctgtcc ttttaccaga caaccattac 600  
ctgtcccacac aatctgccct ttgcggaaat cccaacgaaa agagagacca catggcctt 660  
cttggcttg taacagctgc tgggattaca catggcatgg atgaactata caaactcgag 720  
aattcgacca tgggtgatgt tgagaaaggc aagaagattt ttattatgaa gtgttcccag 780  
tgccacaccg ttgaaaagg aggcaagcac aagactgggc caaatctcca tggtctctt 840  
gggcggaga caggtcaggc ccctggatac tcttacacag ccgccaataa gaacaaaggc 900  
atcatctggg gagaggatac actgatggag tatttggaga atcccgccaa gtacatccct 960  
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tatctcaaaa aagctactaa tgag 1044

<210> 4  
<211> 348  
<212> PRT  
<213> Artificial

<220>  
<223> Synthetic polypeptide

<400> 4

Met Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val  
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Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu  
20 25 30

Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys  
35 40 45

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Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Leu  
50 55 60

Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Arg  
65 70 75 80

His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg  
85 90 95

Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val  
100 105 110

Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile  
115 120 125

Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn  
130 135 140

Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly  
145 150 155 160

Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Gly Val  
165 170 175

Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro  
180 185 190

Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser  
195 200 205

Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Gly Phe Val  
210 215 220

Thr Ala Ala Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys Leu Glu  
225 230 235 240

Asn Ser Thr Met Gly Asp Val Glu Lys Gly Lys Lys Ile Phe Ile Met  
245 250 255

Lys Cys Ser Gln Cys His Thr Val Glu Lys Gly Gly Lys His Lys Thr  
260 265 270

Gly Pro Asn Leu His Gly Leu Phe Gly Arg Lys Thr Gly Gln Ala Pro  
275 280 285

Gly Tyr Ser Tyr Thr Ala Ala Asn Lys Asn Lys Gly Ile Ile Trp Gly  
290 295 300

Glu Asp Thr Leu Met Glu Tyr Leu Glu Asn Pro Ala Lys Tyr Ile Pro  
305 310 315 320

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Gly Thr Lys Met Ile Phe Val Gly Ile Lys Lys Lys Glu Glu Arg Ala  
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Asp Leu Ile Ala Tyr Leu Lys Lys Ala Thr Asn Glu  
 340 345

<210> 5  
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<212> DNA  
 <213> Artificial

<220>  
 <223> Synthetic oligonucleotide

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acaggtcagg cccctggata ctcttacaca gccgccaata agaacaagg catcatctgg	180
ggagaggata cactgatgga gtatttggag aatccgc当地 agtacatccc tggaaacaaa	240
atgatcttg tcggcattaa gaagaaggaa gaaagggcag acttaatagc ttatctcaa	300
aaagctacta atgagggtcg acccggatg agtaaaggag aagaacttt cactggagtt	360
gtcccaattc ttgttgaatt agatggatg gttaatggc acaaatttc tgtcagtgg	420
gagggtgaag gtgatgcaac atacggaaaa cttaccctta aatttattt cactactgg	480
aaactacctg ttccatggcc aacacttgc actactctct cttatgggt tcaatgctt	540
tcaagatacc cagatcatat gaaacggcat gactttca agagtccat gcccgaaggt	600
tatgtacagg aaagaactat attttcaaa gatgacggga actacaagac acgtgctgaa	660
gtcaagttt aaggtgatac cttgttaat agaatcgagt taaaaggtat tgattttaaa	720
gaagatggaa acattctgg acacaaattg gaatacaact ataactcaca caatgtatac	780
atcatggcag acaaacaaaa gaatggaatc aaagttaact tcaaaattag acacaacatt	840
gaagatggag gcgttcaact agcagaccat tatcaacaaa atactccat tggcgatgg	900
cctgtccttt taccagacaa ccattacctg tccacacaaat ctgcccttc gaaagatccc	960
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ggcatggatg aactatacaa a	1041

<210> 6  
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<212> PRT  
 <213> Artificial

<220>  
 <223> Synthetic polypeptide

<400> 6

Met Gly Asp Val Glu Lys Gly Lys Lys Ile Phe Ile Met Lys Cys Ser  
 1 5 10 15

## PA0394 PCT - Sequence Listing - Patentin 3.2.ST25

Gln Cys His Thr Val Glu Lys Gly Gly Lys His Lys Thr Gly Pro Asn  
20 25 30

Leu His Gly Leu Phe Gly Arg Lys Thr Gly Gln Ala Pro Gly Tyr Ser  
35 40 45

Tyr Thr Ala Ala Asn Lys Asn Lys Gly Ile Ile Trp Gly Glu Asp Thr  
50 55 60

Leu Met Glu Tyr Leu Glu Asn Pro Ala Lys Tyr Ile Pro Gly Thr Lys  
65 70 75 80

Met Ile Phe Val Gly Ile Lys Lys Glu Glu Arg Ala Asp Leu Ile  
85 90 95

Ala Tyr Leu Lys Lys Ala Thr Asn Glu Gly Arg Pro Gly Met Ser Lys  
100 105 110

Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val Glu Leu Asp  
115 120 125

Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu Gly Glu Gly  
130 135 140

Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys Thr Thr Gly  
145 150 155 160

Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Leu Ser Tyr Gly  
165 170 175

Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Arg His Asp Phe  
180 185 190

Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg Thr Ile Phe  
195 200 205

Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val Lys Phe Glu  
210 215 220

Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile Asp Phe Lys  
225 230 235 240

Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn Tyr Asn Ser  
245 250 255

His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly Ile Lys Val  
260 265 270

Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Gly Val Gln Leu Ala  
275 280 285

## PA0394 PCT - Sequence Listing - Patentin 3.2.ST25

Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro Val Leu Leu  
 290 295 300

Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser Lys Asp Pro  
 305 310 315 320

Asn Glu Lys Arg Asp His Met Val Leu Leu Gly Phe Val Thr Ala Ala  
 325 330 335

Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys  
 340 345

<210> 7

<211> 1044

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<400> 7

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aaacttaccc ttaaatttat ttgcactact ggaaaactac ctgttccatg gccaacactt	180
gtcactactc tctcttatgg tggtaatgc tttcaagat acccagatca tatgaaacgg	240
catgactttt tcaagagtgc catgcccga ggttatgtac aggaaagaac tatattttc	300
aaagatgacg ggaactacaa gacacgtgct gaagtcaagt ttgaaggtga tacccttgtt	360
aatagaatcg agttaaaagg tattgatttt aaagaagatg gaaacattct tggcacacaaa	420
ttggaataca actataactc acacaatgta tacatcatgg cagacaaaca aaagaatgga	480
atcaaagtta acttcaaaat tagacacaac attgaagatg gaggcggtca actagcagac	540
cattatcaac aaaatactcc aattggcgat ggccctgtcc ttttaccaga caaccattac	600
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cttggcttg taacagctgc tgggattaca catggcatgg atgaactata caaactcgag	720
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tatctcaaaa aagctactaa tgag	1044

<210> 8

<211> 348

<212> PRT

<213> Artificial

## PA0394 PCT - Sequence Listing - Patentin 3.2.ST25

&lt;220&gt;

&lt;223&gt; Synthetic polypeptide

&lt;400&gt; 8

Met Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val  
1 5 10 15

Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu  
20 25 30

Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys  
35 40 45

Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Leu  
50 55 60

Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Arg  
65 70 75 80

His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg  
85 90 95

Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val  
100 105 110

Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile  
115 120 125

Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn  
130 135 140

Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly  
145 150 155 160

Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Gly Val  
165 170 175

Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro  
180 185 190

Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser  
195 200 205

Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Gly Phe Val  
210 215 220

Thr Ala Ala Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys Leu Glu  
225 230 235 240

Asn Ser Thr Met Gly Asp Val Glu Lys Gly Lys Lys Ile Phe Ile Met  
245 250 255

## PA0394 PCT - Sequence Listing - Patentin 3.2.ST25

Lys Cys Ser Gln Cys His Thr Val Glu Lys Gly Gly Lys His Lys Thr  
260 265 270

Gly Pro Asn Leu His Gly Leu Phe Gly Arg Lys Thr Gly Gln Ala Pro  
275 280 285

Gly Tyr Ser Tyr Thr Ala Ala Asn Lys Asn Lys Gly Ile Ile Trp Gly  
290 295 300

Glu Asp Thr Leu Met Glu Tyr Leu Glu Asn Pro Lys Lys Tyr Ile Pro  
305 310 315 320

Gly Thr Lys Met Ile Phe Val Gly Ile Lys Lys Lys Glu Glu Arg Ala  
325 330 335

Asp Leu Ile Ala Tyr Leu Lys Lys Ala Thr Asn Glu  
340 345

<210> 9

<211> 1041

<212> DNA

<213> Artificial

<220>

<223> Synthetic oligonucleotide

<400> 9

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acaggtcagg cccctggata ctcttacaca gccgccaata agaacaagg catcatctgg	180
ggagaggata cactgatgga gtatttggag aatcccaaga agtacatccc tggAACAAA	240
atgatcttg tcggcattaa gaagaaggaa gaaaggcag acttaatagc ttatctcaa	300
aaagctacta atgagggtcg acccggtatg agtaaaggag aagaacttt cactggat	360
gtcccaattc ttgttgaatt agatggatg gttaatggc acaaatttc tgtcagtgg	420
gagggtgaag gtgatgcaac atacggaaaa cttaccctta aatttattt cactactgg	480
aaactacctg ttccatggcc aacacttgc actactctc cttatggtgt tcaatgttt	540
tcaagatacc cagatcatat gaaacggcat gacttttca agagtccat gcccgaagg	600
tatgtacagg aaagaactat attttcaaa gatgacgggaa actacaagac acgtgctgaa	660
gtcaagttt aaggtgatac cttgttaat agaatcgagt taaaaggat tgatttaaa	720
gaagatggaa acattttgg acacaaatttgaatacaact ataactcaca caatgtatac	780
atcatggcag acaaacaaaa gaatggaatc aaagttact tcaaaattttag acacaacatt	840
gaagatggag gcgttcaact agcagaccat tatcaacaaa atactccat tggcgatggc	900
cctgtcctt taccagacaa ccattacctg tccacacaaat ctgccccttc gaaagatccc	960
aacgaaaaga gagaccacat ggcccttctt ggcttgtaa cagctgctgg gattacacat	1020

## PA0394 PCT - Sequence Listing - Patentin 3.2.ST25

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<210> 10  
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<223> Synthetic polypeptide

&lt;400&gt; 10

Met Gly Asp Val Glu Lys Gly Lys Lys Ile Phe Ile Met Lys Cys Ser  
1 5 10 15

Gln Cys His Thr Val Glu Lys Gly Gly Lys His Lys Thr Gly Pro Asn  
20 25 30

Leu His Gly Leu Phe Gly Arg Lys Thr Gly Gln Ala Pro Gly Tyr Ser  
35 40 45

Tyr Thr Ala Ala Asn Lys Asn Lys Gly Ile Ile Trp Gly Glu Asp Thr  
50 55 60

Leu Met Glu Tyr Leu Glu Asn Pro Lys Lys Tyr Ile Pro Gly Thr Lys  
65 70 75 80

Met Ile Phe Val Gly Ile Lys Lys Lys Glu Glu Arg Ala Asp Leu Ile  
85 90 95

Ala Tyr Leu Lys Lys Ala Thr Asn Glu Gly Arg Pro Gly Met Ser Lys  
100 105 110

Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val Glu Leu Asp  
115 120 125

Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu Gly Glu Gly  
130 135 140

Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys Thr Thr Gly  
145 150 155 160

Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Leu Ser Tyr Gly  
165 170 175

Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Arg His Asp Phe  
180 185 190

Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg Thr Ile Phe  
195 200 205

Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val Lys Phe Glu  
210 215 220

## PA0394 PCT - Sequence Listing - Patentin 3.2.ST25

Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile Asp Phe Lys  
225 230 235 240

Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn Tyr Asn Ser  
245 250 255

His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly Ile Lys Val  
260 265 270

Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Gly val Gln Leu Ala  
275 280 285

Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro Val Leu Leu  
290 295 300

Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser Lys Asp Pro  
305 310 315 320

Asn Glu Lys Arg Asp His Met Val Leu Leu Gly Phe Val Thr Ala Ala  
325 330 335

Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys  
340 345

<210> 11

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<212> DNA

<213> Artificial

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<223> Synthetic oligonucleotide primer

<400> 11

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<211> 37

<212> DNA

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<223> Synthetic oligonucleotide primer

<400> 12

gttgttgcg accttactca ttagtagctt ttttgag

37

<210> 13

<211> 34

<212> DNA

<213> Artificial

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<223> Synthetic oligonucleotide primer

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gttgttgcg accctcatta gtagtttt tgag

34

## PA0394 PCT - Sequence Listing - Patentin 3.2.ST25

<210> 14  
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<213> Artificial

<220>  
<223> Synthetic oligonucleotide primer

<400> 15  
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41